

The Exploration and Practice of Career Planning Course Construction from the Perspective of Innovation and Entrepreneurship Education

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Abstract

Under the dual pressures of university enrollment expansion and delayed retirement policies, the employment landscape for college graduates remains challenging. The distinctive career perspectives of the post-2000 generation have further intensified employment concerns, significantly impacting social development. This paper examines higher education as a research subject, focusing on enhancing students' employability. Through curriculum development in innovation and entrepreneurship education and career planning, it proposes a "Dual Innovation Empowerment and Multi-Party Collaboration" system for comprehensive career cultivation. This framework not only summarizes the practical experience of Liaoning University of Science and Technology in talent development but also represents a novel teaching reform strategy, offering valuable insights for higher education institutions in talent cultivation.

Keywords

Innovation and entrepreneurship education; Career planning; Course Construction.

1. Introduction

In recent years, the achievements of college enrollment expansion have been remarkable. It can be predicted that the scale of college graduates will remain stable at over 10 million for a period in the future. At the same time, the replacement of traditional jobs by artificial intelligence technology and the newly implemented delayed retirement policy have reduced the number of job opportunities in recent years to a certain extent. Faced with internal and external pressures, college students are facing severe challenges in their employment situation.

From the perspective of supply-demand matching, there is a certain mismatch between the talent demand side of the industry market and the talent supply side of higher education, and the inherent structural contradictions in employment still exist. From the perspective of employability, new business forms, new industries, and new technologies have significantly raised the requirements for graduates' employability, but the current quality of graduate training cannot fully meet the employment requirements of these new elements. From the perspective of employment concepts, graduates prefer stable jobs in the public sector or state-owned central enterprises. The enthusiasm for taking exams for government positions and public institution posts remains high, and phenomena such as "delayed employment" and "postponed employment" are increasing. This will inevitably increase social contradictions and affect the stable development of society.

Colleges and universities, as the main positions for national talent cultivation, must attach great importance to the employment of college students. Starting from the basic education of innovation and entrepreneurship, we should empower career planning education with innovation and entrepreneurship, improve the quality of independent cultivation of innovative talents, and focus on employment from the strategic dimension of strongly supporting the development of new-quality productive forces, so as to continuously enhance the employability of college graduates.

Based on the above background, combined with the course-offering situation of our university and discussions with departments such as the Academic Affairs Office, Student Affairs Office, and Enrollment and Employment Office, we have now formed a full-cycle cultivation system for college students' career planning featuring "innovation and entrepreneurship empowerment and multi-party linkage", which is based on curriculum construction and aims to enhance core employment competitiveness.

2. Literature Review

The role of innovation and entrepreneurship education in colleges and universities is not only reflected in cultivating students' entrepreneurial skills, but also in guiding them to make scientific career plans, empowering their career development, and improving their employment competitiveness.

Liu Dan (2018) proposed a new model of innovation and entrepreneurship education from the perspective of the inherent connection between career development and dual-innovation education [1]. Zhang Duoliang and Gu Xin (2023) emphasized the necessity and urgency of integrating ideological and political education into career planning courses from the perspective of higher education. They also put forward specific implementation paths and optimization strategies to enhance students' employment value guidance and employment education support through the curriculum ideological and political education in "Career Planning" [2]. Zhao Juan (2025) as well as Cao Guibin et al. (2025) argued that the core value of this course lies in realizing the unity of instrumental rationality and value rationality. It should not only help students master career planning theories and job-hunting skills but also guide them to combine personal development with national strategic needs and industrial development trends, cultivating a new generation of young people with family and country feelings and social responsibility [3-4]. Liang Peng et al. (2024) pointed out that the course has established a trinity teaching objective and content system consisting of knowledge, ability, and value. The knowledge objective focuses on the cognition of national needs and industry dynamics, the ability objective emphasizes the cultivation of self-analysis and career decision-making capabilities, and the value objective highlights the guidance of ideals, beliefs, and professional values [5].

Despite certain achievements in curriculum construction, the current career planning courses still face multiple dilemmas. In terms of the teaching staff, most instructors are counselors, class teachers, and a small number of professional course teachers. The degree of specialization is low, and they generally lack systematic career planning theory training and enterprise practical experience, leading to a disconnect between teaching content and actual workplace needs. Additionally, their ability to integrate ideological and political education into the curriculum is insufficient. Research by Liu Bingxi et al. (2025) found that the excavation and refinement of ideological and political elements in curriculum design are not in-depth enough. The setting of knowledge and ability objectives does not fully incorporate requirements such as ideal and belief education, and the teaching design lacks seamless connection with curriculum ideological and political education. Meanwhile, the curriculum setup is fragmented and lacks systematicness throughout the four years of university, making it difficult to adapt to students'

growth needs at different stages. There are also shortcomings in practical teaching and assessment evaluation. Students lack real workplace experience, and there is a gap between job-hunting skills training and actual job-hunting scenarios. Assessment evaluation is mostly result-oriented, neglecting process evaluation and the assessment of value formation [6]. In response to the above issues, academic circles have proposed various reform paths, such as constructing a stepped curriculum system, designing differentiated content according to the characteristics of students in different grades, thoroughly exploring ideological and political elements in the curriculum, and integrating major national strategies and typical industry figures' deeds into all aspects of teaching. Wang Xing (2025) proposed the need to closely align with market demands, timely update information on emerging industry trends and talent needs, and strengthen the integration with professional education [7]. Li Bihong (2025) promoted models such as flipped classrooms and online-offline blended teaching, built digital resource platforms with the help of digital technology, and used VR technology to simulate professional scenarios, enhancing the interactivity and immersion of teaching [8]; Ren Xuemin et al. (2024) found that emerging elements such as digital technology and the OBE (Outcome-Based Education) concept provide new perspectives for curriculum reform. Digital technology can improve the precise supply level of curriculum ideological and political education, enrich the presentation forms of teaching resources, expand educational scenarios, realize personalized teaching through big data analysis, and enhance the effectiveness of education [9].

The above research results all aim to improve college students' career planning and employment abilities, focusing on educational practice and student development. However, there are differences in research objects, research scopes, research purposes, and research focuses. For example, the research objects include different student groups such as vocational college students and undergraduate students; some research focuses on specific regions or specific types of universities; some focuses on teaching satisfaction, some on curriculum design, and others on the construction of talent training models. These differences reflect the different understandings and research priorities of different researchers on career planning education. Overall, existing research has formed relatively rich theoretical achievements and practical paths, but there is still room for further exploration in adapting to the personalized needs of students in different majors, the in-depth integration model of digital technology, and the long-term evaluation mechanism of reform effects.

3. The Connotation of Innovation and Entrepreneurship Education and Its Role in Career Planning

3.1. The Connotation of Innovation and Entrepreneurship Education

Innovation and entrepreneurship education, a new educational model, aims to cultivate college students' innovative awareness and entrepreneurial capabilities, thereby inspiring their ability to proactively adapt to and lead social development. This model not only focuses on knowledge imparting, but also attaches great importance to fostering students' practical abilities, innovative thinking, and entrepreneurial spirit to meet the rapidly changing economic and market demands. The connotation of innovation and entrepreneurship education is mainly reflected in the following four aspects:

Cultivation of innovative awareness: It emphasizes encouraging students to think independently, explore boldly, not be satisfied with the status quo, and dare to question and improve traditional concepts and conventional methods.

Enhancement of entrepreneurial capabilities: It focuses on improving students' practical skills such as market analysis, risk assessment, team management, and financial planning, laying a foundation for their potential entrepreneurial activities in the future.

Strengthening of practical operation capabilities: Through project-driven teaching, case analysis, simulated operation, and other methods, it enables students to learn and grow in practical operations, thereby improving their problem-solving abilities.

Development of comprehensive qualities: It not only cultivates students' professional skills, but also enhances their comprehensive qualities such as leadership, communication and coordination abilities, and teamwork spirit.

3.2. The Role of Innovation and Entrepreneurship Education in Career Planning

First, it can effectively cultivate students' innovative thinking, entrepreneurial capabilities, and practical abilities. In the fierce job market, students with such abilities are more likely to be favored by employers, thus enhancing their employment competitiveness.

Second, it promotes personal development. Career planning is not only about finding a job, but also about realizing personal value and career development. Innovation and entrepreneurship education helps students explore their potential, plan their career paths, and achieve self-actualization.

Third, it fosters lifelong learning abilities. In today's era of rapid knowledge renewal, lifelong learning has become an inevitable trend. It cultivates students' autonomous learning abilities and adaptability to changes, laying a foundation for their lifelong learning and career development.

To sum up, innovation and entrepreneurship education plays a crucial role in career planning. It not only provides students with the skills and qualities needed to adapt to future social and economic development, but also lays a solid foundation for their personal growth and career development. This is consistent with the core goal of career planning, which focuses not only on students' short-term employment, but also on their long-term career development. The integration of innovation and entrepreneurship education helps students develop the ability to proactively adapt to market changes during their career exploration, laying a foundation for the sustainable development of their careers. Through this education, students can better understand themselves, plan for the future, and contribute to the realization of their personal career dreams and social values.

4. Teaching Reform Practice from University of Science and Technology Liaoning

The integration of innovation and entrepreneurship education with career planning aims to help students recognize different career paths as professional and technical personnel, managers, or entrepreneurs by cultivating their innovative spirit and entrepreneurial capabilities. This integration also assists students in better planning their careers and enhancing their employment competitiveness. Based on the teaching practice experience of Liaoning University of Science and Technology, the author has summarized and designed a full-cycle cultivation system for college students' career planning featuring "empowerment through innovation and entrepreneurship, and linkage among multiple parties". "Empowerment through innovation and entrepreneurship" refers to enabling career planning with innovation and entrepreneurship education. It helps students, under the guidance of innovative thinking, understand the development trends of employment, entrepreneurship, and various industries and occupations, facilitating more scientific and rational career planning. "Linkage among multiple parties" means uniting the efforts of various departments across the university, such as the Academic Affairs Office, Student Affairs Office, Youth League Committee, and Enrollment and Employment Office, to stimulate students' learning motivation, help them set learning goals, guide their academic development, and better realize their career ideals.

4.1. Constructing a Curriculum System Throughout the Entire Teaching Cycle

The curriculum system aims to cultivate students' innovative thinking, entrepreneurial capabilities, and the ability to integrate these capabilities into their personal career development through systematic learning and practice. Liaoning University of Science and Technology offers the following three quality development compulsory courses for students of all majors, with different course providers: the course of Career Planning offers in the first semester, it has 16 class hours and is worth 0.5 credits. the course of Innovation and Entrepreneurship Management offers in the fourth semester, it has 32 class hours and is worth 2 credits. The course of College Students' Employment Guidance offers in the seventh semester, it has 16 class hours and is worth 0.5 credits.

The course content covers knowledge modules related to the improvement of innovation and entrepreneurship capabilities, career planning capabilities, and employability, including adapting to college life and majors, self-awareness, career exploration, determination and implementation of career goals, innovative thinking cultivation, entrepreneurship and entrepreneur development, business model construction, employment policies and regulations, and employability enhancement. Meanwhile, through teaching methods that combine theory with practice and project-driven learning, students can master basic knowledge while gaining practical operation experience, laying a solid foundation for their future career paths.

4.2. Building a Practical Teaching Platform for Innovation and Entrepreneurship Education and Career Planning Education

Following the construction concept of "school-enterprise cooperation, school-government cooperation, and school-local cooperation", Liaoning University of Science and Technology has established innovation and entrepreneurship practice education bases with organizations such as Liaoning Veteran Enterprise Management Group Co., Ltd., Anshan Technology Market Co., Ltd., Tsinghua University Rural Revitalization Qianshan Workstation, and Anshan Human Resources Service Industrial Park over the years. Through school-enterprise cooperation internship programs, students can apply their learned knowledge and skills in real work environments. The university cooperates with enterprises to provide internships in multiple positions, including technology research and development, marketing, and administrative management, enhancing students' career adaptability and employability.

At the same time, an enterprise mentor talent pool has been established. Through mentor guidance, project demonstration and feedback, and other links, personalized guidance and support are provided to students to help them better plan their careers and achieve the dual improvement of personal value and social value.

4.3. The Academic Affairs Office Taking the Lead in Constructing a Dynamic Guidance System for College Students' Academic Development

A Student Academic Development Guidance Center has been set up under the Academic Affairs Office. It carries out academic adaptation, academic promotion, and academic enhancement guidance activities for students at different academic stages, integrating the cultivation of students' career planning awareness and capabilities into the three dynamic guidance systems.

4.3.1. Academic Adaptation Guidance for Freshmen

Professional teachers are assigned as class mentors, with pilots in colleges such as the School of Civil Engineering, School of Architecture and Art, School of Foreign Languages, and School of Computer and Software Engineering, and the program is planned to be promoted gradually. Customized College Student Growth and Development Record Book is provided to help students set academic planning goals. Undergraduate Academic Guide is compiled to answer students' questions. After freshmen enroll (around October every year), a series of lectures

titled "Guiding Newcomers, Building Dreams for a New Chapter" are held, covering topics such as psychological adaptation, academic planning, and learning methods.

4.3.2. Academic Promotion Guidance for Sophomores and Above

In terms of academic support, based on the "Help Group", a series of peer mutual assistance activities are carried out, covering the entire academic year through daily one-on-one appointment guidance (March-June and September-December every year), concentrated offline guidance before exams (June and December every year), and online study room activities during winter and summer vacations (July-August and January-February every year). In terms of learning promotion, adhering to the concept of "promoting learning through competitions", various competitions are held relying on the Student Academic Development Committee. These include the Student Class Notes Competition (around November every year), the "Word Master" English Vocabulary Competition (March every year), the College Students' Ideological and Political Open Course Speech Activity (March-June every year), and the College Students' Ideological and Political Scenario Microfilm Competition (March-June every year). In December every year, the "Career Planning Book Competition" is jointly held with the Student Affairs Office, Enrollment and Employment Office, and Innovation and Entrepreneurship College, with groups divided by grade.

4.3.3. Academic Enhancement Guidance for Students with Spare Capacity

A series of guidance activities are carried out around themes such as innovation and entrepreneurship competitions, certificate examinations, postgraduate entrance examinations, and career and employment choices. These include regular activities such as postgraduate entrance examination experience sharing and postgraduate entrance examination psychological counseling (December every year). Relying on the "Help Group", guidance on innovation and entrepreneurship competitions and certificate examinations is provided (May and November every year) to meet students' different academic and career development needs.

4.4. The Student Affairs Office Implementing Follow-up Guidance and Fulfilling the "Three Integrations" with Daily Ideological and Political Education

The integration of students' career development planning education with their daily ideological and political education is strengthened. With theme-based class meetings as the carrier, the key time nodes of "admission season", "graduation season", "evaluation season", and "commendation season" are seized to carry out regular and long-term career planning education activities. The capabilities of counselors in career planning and employment guidance are continuously improved, and the guidance on students' career planning and the supervision and management of implementation are well conducted to enhance students' awareness of development planning, stimulate their autonomous learning motivation, and improve the matching degree of their career development goals.

4.4.1. Integrating Students' Career Planning with the "Class Meeting Quality Improvement Project"

Focusing on the requirements of the "nine types of class meetings", the overall design of "monthly themes" is strengthened. Students' career planning is taken as a regular theme in the first month of each semester to guide students to reasonably adjust and optimize their career development goals, improve their Career Planning Book, and grasp the key points of learning in the semester. Counselor quality improvement training camps are held to improve counselors' career planning guidance capabilities. Activities such as "model class meeting" selection, "theme-based class meeting competition", and "class meeting observation" are carried out to provide effective guidance to students.

4.4.2. Integrating Students' Career Planning with the "Upholding Virtue and Valuing Learning, Learning from Role Models" Activity

Outstanding alumni models are widely identified in fields such as industry experts, academic role models, entrepreneurial models, and political elites, and publicity efforts are increased for students to learn from. The "Three Comparisons, One Promotion, and One Inheritance" activity is continuously promoted, and selection and commendation activities for outstanding individuals and groups are vigorously carried out during the "evaluation season" and "commendation season" to create a good atmosphere of mutual learning and assistance across the university.

4.4.3. Integrating Career Planning with the Construction of the "One-stop" Student Community Comprehensive Management Model

The supply of ideological and political elements in the "one-stop" student community is strengthened to provide students with personalized career planning guidance. Outstanding alumni, corporate executives, and other social forces are invited to enter the community to share their growth paths, insights, and gains with students. The freshman admission education module in the "admission season" is optimized, with students' career planning as an important content to guide students to establish career planning awareness as early as possible.

Jointly with the Innovation and Entrepreneurship College, training on career planning guidance for counselors is carried out. In collaboration with the Enrollment and Employment Office, employment guidance services during the "graduation season" are strengthened to help students accurately grasp industry development trends, reasonably position their career goals, and successfully obtain employment.

4.4.4. Jointly Carrying Out Student Club Activities with the Youth League Committee to Cultivate the Spirit of Innovation and Entrepreneurship and Guide Career Development

Based on the different career paths of entrepreneurship and employment, to help students gain a deeper understanding of the essence of entrepreneurship and experience the entrepreneurial process firsthand, the Innovation and Entrepreneurship College, together with the Student Affairs Office and the School Youth League Committee, holds the School ERP Sand Table Simulation Operation Competition for Entrepreneurial Enterprises. This competition enables students to fully understand the differences between entrepreneurship and employment, scientifically plan their personalized careers, and at the same time cultivate their knowledge and skills in enterprise management, as well as their entrepreneurial willingness and entrepreneurial spirit.

4.5. Realizing Full-cycle Cultivation of Employ-ability

The Enrollment and Employment Office, together with the career planning teaching team, has established the "Gangyuanqiao" Employment Guidance Studio. Relying on this studio, the College Students' Employment Guidance course is offered to junior students. The course mainly adopts teaching methods that combine classroom lectures with practical learning, covering modules such as employment situation and policies, resume writing, interview skills and workplace etiquette, preparation of employment materials and information collection, employment agreements and rights protection, and employment psychology and employment concepts. This enables students to understand the employment situation and policies, master the general procedures and methods of job hunting and employment, and establish a positive employment concept.

Every year, the Career Planning Competition is jointly launched with the Innovation and Entrepreneurship College, Academic Affairs Office, and other departments to enhance college

students' awareness of career planning and employment competitiveness. The competition is divided into two tracks:

Growth Track: Students prepare a career development report and present it on-site, introducing their career development plans, specific actions and achievements in realizing career goals. It focuses on examining the scientific nature of students' career development plans and the implementation of their career plans.

Employment Track: Students prepare job resumes and demonstrate their employability on-site. It focuses on examining their employment preparation.

School teachers, human resource specialists from employers, and third-party professional institutions are invited to provide students with a series of employment guidance activities, including resume writing, interview skills, public institution exam guidance, and postgraduate entrance exam guidance. Targeted employment guidance is provided to graduates according to different employment categories such as government, enterprise, and further study, further improving students' job-hunting abilities.

School employment guidance teachers, career planning teachers, and counselors are arranged to be stationed in the "one-stop" student community to receive students' consultations. Using standardized assessment tools combined with teachers' experience, students are helped to accurately understand their interests, abilities, and career values, further clarify their career goals, and solve specific problems encountered in the process of realizing their career goals. One-on-one guidance and consultation are provided to solve students' personalized problems in career planning and job hunting.

Through the above teaching reform strategies, innovation and entrepreneurship education can effectively empower career planning and comprehensively improve students' employability. These strategies not only help students better understand themselves and plan for the future, but also provide them with ways to realize their personal career dreams and social values. Colleges and universities should actively promote these teaching reforms to cultivate high-quality talents who can adapt to the development of future society.

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